

Paper 13

Filed on behalf of:

Advanced Life Science Institute, Inc.  
David Einhorn, Esq.  
Engene Lieberstein, Esq.  
ANDERSON KILL & OICK  
1251 Avenue of the Americas  
New York, NY 10020  
Tel: 212-278-1359  
Fax: 212-278-1733

Filed: October 16, 2006

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Advanced Life Science Institute, Inc.,  
Senior Party  
(Patent 5,976,832;  
Inventors: Jiro Hitomi; Ken Yamaguchi; Tokujiro Yamamura; and  
Tatsuki Kimura).

v.

Human Genome Sciences, Inc.,  
Junior Party  
(Application 08/761,289,  
Inventors: Jian Ni; Guo-Liang Yu; Pedro Alfonso; Reiner Gentz; and  
Jeffrey Y. Su),

Patent Interference 105,501 (RES)  
(Technology Center 1600)

ALS CLEAN COPY OF CLAIMS AND SEQUENCE

1 MAIL STOP INTERFERENCE  
2 Board of Patent Appeals and Interferences  
3 U.S. Patent and Trademark Office  
4 P.O. Box 1450  
5 Alexandria, VA 22313-1450

6  
7 Sir:

8  
9 Pursuant to the Declaration of Interference mailed September 28, 2006, 37 C.F.R.

10 § 41.110(a), and B.P.A.I. Standing Order ¶ 110, Advanced Life Science Institute, Inc. (ALS)  
11 hereby submits on the following pages 1-3, a clean copy of the claims in U.S. Patent No.  
12 5,976,832, and a clean copy of SEQ ID NO:19 and SEQ ID NO: 20, which is referenced in the  
13 claims. As noted in the Declaration of Interference, claims 1-11 have been designated as  
14 corresponding to the count.

15

16 Respectfully submitted,  
17  
18  
19  
20  
21  
22  
23  
24 Date: October 16, 2006  
25  
26 ANDERSON KILL & OICK  
27 1251 Avenue of the Americas  
28 New York, NY 10020

/Eugene Lieberstein, Reg. No. 24,645/  
Eugene Lieberstein  
Backup Lead Attorney for  
Advanced Life Science Institute, Inc.  
Registration No. 24,645

Claims for US 5,976,832

1. An isolated and purified DNA encoding a calcium-binding protein that possesses calcium binding activity comprising an amino acid sequence which is identical to the amino acid sequence listed in SEQ ID NO: 19 or 20.
2. A recombinant DNA molecule comprising DNA according to claim 1 which is linked to a DNA sequence capable of regulating the expression of said DNA.
3. A recombinant DNA molecule according to claim 2, wherein said DNA sequence capable of regulating the expression of the DNA is derived from procaryote or eucaryote.
4. An expression vector comprising a recombinant DNA molecule according to claim 2.
5. Recombinant host cells which have been transformed with an expression vector according to claim 4.
6. Recombinant host cells according to claim 5, wherein the host cells are eukaryotic cells or prokaryotic cells.
7. Recombinant host cells according to claim 6, wherein the prokaryotic cells are bacterial cells.
8. Recombinant host cells according to claim 7, wherein said bacterial cells are of *Escherichia coli*.
9. Recombinant host cells according to claim 6, wherein said the eukaryotic cells are yeast or filamentous fungus.
10. Recombinant host cells according to claim 6, wherein said eukaryotic cells are plant cells or animal cells.
11. A method for producing calcium-binding protein that possesses calcium binding activity comprising an amino acid sequence which is identical to the amino acid sequence listed in SEQ ID NO: 19 or 20 characterized by culturing host cells transformed with an expression of vector comprising DNA encoding said protein, and collecting said protein from the culture.
12. An isolated and purified DNA (1) capable of being hybridized under a high stringency condition of 0.5-2% SSC, 0.1-0.5% SDS and a temperature between room temperature and 42° C. with DNA (2) having the nucleotide

sequence listed in SEQ ID NO: 1 or 12, and encoding a protein with calcium-binding activity.

13. A recombinant DNA molecule comprising DNA according to claim 12 which is linked to a DNA sequence capable of regulating the expression of said DNA.

14. A recombinant DNA molecule according to claim 12, wherein said DNA sequence capable of regulating the expression of the DNA is derived from prokaryote or eukaryote.

15. An expression vector comprising a recombinant DNA molecule according to claim 13.

16. Recombinant host cells which have been transformed with an expression vector according to claim 15.

17. Recombinant host cells according to claim 16, wherein the host cells are eukaryotic cells or prokaryotic cells.

18. Recombinant host cells according to claim 17, wherein the prokaryotic cells are bacterial cells.

19. Recombinant host cells according to claim 18, wherein said bacterial cells are *Escherichia coli*.

20. Recombinant host cells according to claim 17, wherein said the eukaryotic cells are yeast or filamentous fungus.

21. Recombinant host cells according to claim 17, wherein said eukaryotic cells are plant cells or animal cells.

22. A method for producing calcium-binding protein that possesses calcium binding activity characterized by culturing host cells transformed with an expression of vector comprising DNA encoding said protein, and collecting said protein from the culture, wherein said DNA (1) capable of being hybridized under a high stringency condition of 0.5-2-times. SSC, 0.1%-0.5% SDS and a temperature between room temperature and 42° C. with DNA (2) having the nucleotide sequence listed in SEQ ID NO: 1 or 12, and encoding a protein with calcium-binding activity.

SEQ ID No. 19:

Met Thr Lys Leu Glu Asp His Leu Glu Gly Ile Ile Asn Ile Phe His Gln Tyr  
5 10 15

Ser Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu Leu Lys  
20 25 30

Gln Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp  
35 40 45 50

Gln Pro Thr Ile Asp Lys Ile Phe Gln Asp Leu Asp Ala Asp Lys Asp  
55 60 65

Gly Ala Val Ser Phe Glu Glu Phe Val Val Leu Val Ser Arg Val Leu  
70 75 80

Lys Thr Ala His Ile Asp Ile His Lys Glu  
85 90